

AMENDMENT TO THE DRAWINGS

The attached sheet of drawings includes changes to Fig. 1. This sheet, which includes only Fig. 1, replaces the original sheet including only Fig. 1. As the only change to Fig. 1 is the addition of the legend "Related Art", no annotated sheet is believed necessary and none is submitted herein.

Attachment: Replacement Sheet, 1 page

REMARKS

Applicant would like to thank the Examiner for the careful consideration given the present application. The application has been carefully reviewed in light of the Office action, and amended as necessary to more clearly and particularly describe the subject matter which applicant regards as the invention.

Applicant notes with thanks that the Examiner has indicated that claims 1-20 were allowable and that the claim listed as 28 (now new claim 38) contains allowable subject matter and would be allowable if rewritten in independent form. Applicant submits that the allowable status of these claims is unchanged by the present amendment and, therefore claims 1-20 and 38 will not be discussed further hereinafter.

The original listing of claims was incorrectly numbered. In particular, there were two claims numbered as claim 21. Accordingly, claims 21-29 have been cancelled and new claims 30-38 have been added. New claim 30 corresponds with the first cancelled claim 21, and new claim 31 corresponds to the second cancelled claim 21. New claims 30-38 correspond to now cancelled claims 21-29, respectively.

While claims 21-29 have been cancelled, new claims 30-38 contain the same or similar steps. Accordingly, the rejections to claims 21-28 will be treated as though they were directed to the new claims 30-37. Additionally, when features were introduced into the new claims, these features will be referenced for the Examiner's convenience.

Furthermore, new claim 39 has been added and contains independently patentable subject matter as will be discussed hereinafter.

The Examiner has objected to Fig. 1. Specifically, the Examiner requests that

Fig. 1 be resubmitted with the legend of "Related Art." Accordingly, Fig. 1 has been resubmitted with the requested legend.

The Examiner has rejected claims 21, 26, and 27 under 35 U.S.C. 102(b) as being anticipated by U.S. Pat. No. 4,483,618 to Hamar. The Examiner's rejections are traversed for the following reasons.

One aspect of the present invention relates to a method of measuring a distance between first and second points on an object. The method comprises viewing the object with a fixed mirror, generating a laser beam, and reflecting the laser beam with the mirror such that the laser beam is divided into first and second portions that are disposed at a right angle to each other. The method further includes moving the first portion of the laser beam along a measurement path to a first measurement position that places the second portion of the laser beam at the first point on the object as viewed by the mirror, moving the first portion of the laser beam along the measurement path to a second measurement position that places the second portion of the laser beam at the second point on the object as viewed by the mirror, and measuring the distance between the first and second measurement positions. This provides a measure of the distance between the first and second points on the object.

Hamar involves a laser measurement system with a carriage yaw compensator. Specifically, Hamar teaches that a virtual detector probe is used as "a carriage yaw compensator for compensating for any errors in measurement due to non-linearities in the carriage upon which the penta-prism is mounted" (Abstract).

New claim 30, which corresponds to now cancelled claim 21, recites the additional step of "viewing the object with a fixed mirror." Review of Hamar does not

reveal this step. Rather, the mirrors (20, 20') of Hamar only change the direction of the laser beam (18) and do not allow for viewing of the object (14), as will be described below. Additionally, while Giebel discloses a movable mirror (C), the mirror (C) is to focus the light (36) on the scale (26). Tei does not disclose a mirror. Accordingly, claim 30, and claims 31-39 that depend therefrom, are believed to be allowable.

New claim 30 further recites the steps of moving the first portion of the laser beam along a measurement path to a first/second measurement position that places the second portion of the laser beam at the first/second point "on the object as viewed by the mirror." As mentioned hereinbefore, none of the cited references teach or suggest a mirror for viewing the object. In Hamar, there would be no reason to view the object (14), as detectors (24, 26) are used to align the laser beam (18) with the object (14) for measurement.

Since this feature was added subsequent to the Office action, the Examiner has not had the opportunity to apply the cited references to the subject claim. Nevertheless, applicant finds it noteworthy that in Giebel, the mirror (C) is to redirect/focus the light (36) onto the scale (26) as will be discussed in more detail hereinafter. Furthermore, Tei does not disclose a mirror. Therefore, for this further reason, claim 30, and claims 31-39 that depend therefrom, are believed to be allowable.

The Examiner has rejected claims 22-25 under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 2,016,546 to Giebel in view of Hamar. The Examiner's rejections are traversed for the following reason.

Giebel relates to a reflector device for lighting a scale (26). The reflector device

directs light from a light (36) through a loop (32) onto a reflector (C). The reflector (C) reflects the light to illuminate the scale (26) for simplified viewing.

New claim 31 (cancelled claim 22) includes the step of "reflecting the at least one light beam so as to illuminate the area around the object." In Giebel, the measuring device pointer (26), but not the object (1), is illuminated (Figs. 1-2). Furthermore, as mentioned hereinbefore, in Hamar, the detectors (24, 26) are used to align the laser beam (18) with the object (14) for measurement. Accordingly, there would be no need to illuminate the object (14) of Hamar. Therefore, claim 31 is in a condition for allowance.

Claim 28 stands rejected under 35 U.S.C. 103(a) as being unpatentable over JP 217716 to Tei in view of Hamar. The Examiner's rejections are traversed for the following reason.

Tei involves a laser for determining the hemline of clothing. The laser beam irradiator (3) measures the distance between the floor and the hemline of a skirt as illustrated in Fig. 2.

New claim 37 (cancelled claim 28) recites that "the first portion of the laser beam extends vertically and the second portion of the laser beam extends horizontally." Tei measures the "distance between the hemline and the floor" (Abstract). While this is a vertical measurement, the laser beam of Tei extends in a horizontal direction. As Hamar also teaches a horizontal laser beam extension, no reference has been cited that teaches a two portion laser beam extending in vertical and horizontal directions. Therefore, claim 37 is believed to be in a condition for allowance.

New claim 39 recites that "the measurement path is in a horizontal plane and the

first and second points on the object are coplanar in a vertical plane." Hamar teaches a horizontal measurement path (20, 20') and horizontal first and second points on the object (Fig. 1). Giebel discloses a vertical measurement path and first and second points on a vertical plane (Fig. 2). Tei teaches a vertical measurement path (Fig. 2) and vertical first and second points on the object (floor and hemline). None of the references teach that "the measurement path is in a horizontal plane and the first and second points on the object are coplanar in a vertical plane." Accordingly, claim 39 is believed to be independently patentable over the cited art and notice to that effect is requested.

In light of the foregoing, it is respectfully submitted that the present application is in a condition for allowance and notice to that effect is hereby requested. If it is determined that the application is not in a condition for allowance, the Examiner is invited to initiate a telephone interview with the undersigned attorney to expedite prosecution of the present application.

If there are any additional fees resulting from this communication, please charge same to our Deposit Account No. 18-0160, our Order No. HON-14923.

Respectfully submitted,

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